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**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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*Ex parte* LAURENCE J. CULL, BRUCE EDWARD LAWTON, RONALD  
D. SPOOR, and ANER GAL

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Appeal 2008-6028  
Application 10/674,094  
Technology Center 3700

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Decided:<sup>1</sup>February 17, 2009

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Before DEMETRA J. MILLS, ERIC GRIMES, and JEFFREY N.  
FREDMAN, *Administrative Patent Judges*.

GRIMES, *Administrative Patent Judge*.

**DECISION ON APPEAL**

This is an appeal under 35 U.S.C. § 134 involving claims to a fitment  
for attachment to an ophthalmic collection bag. The Examiner has rejected

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil  
action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date  
shown on this page of the decision. The time period does not run from the  
Mail Date (paper delivery) or Notification Date (electronic delivery).

the claims as obvious. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

### STATEMENT OF THE CASE

The Specification discloses that “[d]uring use of a peristaltic pump during surgery an occlusion of the aspiration path may occur” such that “a vacuum level in the aspiration path will continue to build because the pump continues to attempt to pump aspirant through the aspiration path and into a collection bag” (Spec. 1).

The Specification also discloses that “it is well known to air vent the aspiration path,” including “to air vent via a closed bag system where the air to vent the aspiration path is obtained from the collection bag” (*id.*). The Specification discloses that “[i]n order to ensure that a sufficient amount of air is available to vent the aspiration path it has been known to place a spacer element within the bag” but that “it would be desirable to provide a collection bag that accommodates air venting without the need for the separate spacer elements” (*id.* at 2).

Claims 1-4 are pending and on appeal. Claim 1, the only independent claim, is representative and reads as follows:

1. A fitment for attachment to an ophthalmic aspirant collection bag comprising:
  - an elongated connector connected to a ophthalmic pump cartridge providing a conduit for aspirant to flow from the pump cartridge to an interior of the collection bag;
  - the connector having opposing ends wherein a first end is structured for attachment to the pump cartridge and a second end positioned within the interior of the collection bag is structured to form at least one notch in the second end of the connector; and

wherein the notch acts to prevent the collection bag from sealing off the conduit during surgery so that a sufficient amount of air will remain within the bag to allow a surgeon to air-vent an aspiration path during surgery to prevent collapse of an eye of a patient.

The claims stand rejected under 35 U.S.C. § 103(a) as follows:

- claims 1 and 4 as being unpatentable over Wortrich<sup>2</sup> and Sato<sup>3</sup>;
- claims 2 and 3 as being unpatentable over Wortrich, Sato, and Bennett<sup>4</sup>.

## OBVIOUSNESS

### *The Issue*

The Examiner has rejected claims 1 and 4 under 35 U.S.C. § 103 as obvious in view of Wortrich and Sato.

The Examiner finds that “Wortrich discloses an elongated connector or waste line 79 that is connected to an ophthalmic pump cartridge 15 ... with a second end in bag 100,” but does not teach that “the second end of the waste line or connector comprises a notched end” (Ans. 3). The Examiner concludes that it would have been obvious to modify Wortrich’s connector line with a notched end because “Sato discloses an apparatus for removing fluid from a patient comprising a connector line 21 that has ... a second end” with “slit elements or notches 22 ... in order to provide a fluid passageway through the connector line 21 even when the bag 20 collapses around the line 21 due to negative pressure within the bag” (Ans. 3-4).

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<sup>2</sup> Wortrich, US 4,963,131, Oct. 16, 1990.

<sup>3</sup> Sato et al., US 4,416,772, Nov. 22, 1983.

<sup>4</sup> Bennett, US 4,930,997, June 5, 1990.

Appellants contend that the Examiner erred in finding that one of skill in the art would have been motivated to combine the Wortrich and Sato references because (i) Wortrich's system does not require "air in the collection bag in order to vent the aspiration line - because [Wortrich] relies solely on fluid venting to solve the excess vacuum condition in the aspiration line" (App. Br. 3) and (ii) Sato "is directed to blood filtering and not ophthalmic surgery to air-vent an aspiration path" (*id.* at 4).

The issue with respect to this rejection is: Does the evidence support the Examiner's conclusion that one of skill in the art would have been motivated to combine Sato's notched end with the Wortrich waste line?

#### *Findings of Fact*

1. Wortrich discloses "cassettes for use in irrigation and aspiration systems for ophthalmic applications" (Wortrich, col. 1, ll. 6-10).
2. Figure 2 of Wortrich is shown below:

**FIG. 2**

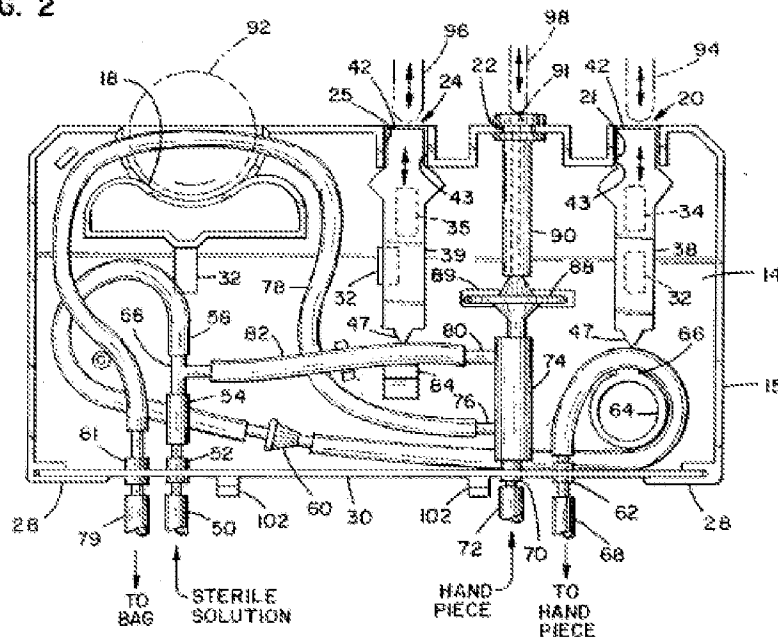


Figure 2 is said to show a plan view of a base section of a cassette with the tubing in place (*id.* at col. 3, ll. 50-53).

3. Wortrich discloses that the cassette comprises an irrigation outlet 62, an aspiration return fitting 70, and a waste line 79 (*id.* at col. 4, l. 60 to col. 5, l. 56).

4. Wortrich discloses that “[t]issue and fluid from the surgical site are returned through the aspiration tubing section 72 to the double-T fitting 74, and then to the aspiration tubing section 78, to be forced, under the suction exerted by the peristaltic pump roller 92, to the waste line 79, and then to the associated bag 100” (*id.* at col. 5, ll. 62-68).

5. Wortrich discloses that

[w]hen the surgeon or operator desires to terminate aspiration quickly and to clean out entrapped material at the suction cannula, ... slider bar 39 moves outwardly through the natural flexibility of the shunt tubing section 82 to allow a flow of sterile solution to reach the double-T fitting 74. At the same time, the irrigation actuator 94 forces the slider bar 38 down onto the irrigation tubing 58, closing off the irrigation flow. Suction on the aspiration line 72 is thus terminated and sterile solution flows through the shunt tubing section 82 into the double-T fitting 74.

(*Id.* at col. 6, ll. 1-13.)

6. Sato discloses an apparatus for concentrating and filtering “[b]ody cavity fluids, such as ascitic fluid and pleural fluid,” and returning the filtered concentrate to the patient intravenously (Sato, abstract).

7. Figure 1 of Sato is shown below:

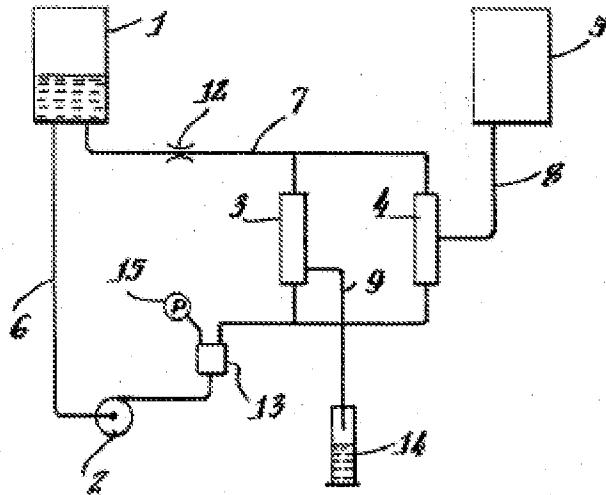


Figure 1 is said to show “a schematic illustration of an embodiment of the body cavity fluid treating apparatus” (*id.* at col. 1, ll. 56-58).

8. Sato discloses that Figure 1 shows “container 1 for holding a body cavity fluid removed from a living body, a pump 2 for transporting the body cavity fluid, a concentrator 3, a filter 4, and a container 5 for holding the concentrated and filtered body cavity fluid” (*id.* at col. 2, ll. 56-60).

9. Figure 5 of Sato is shown below:

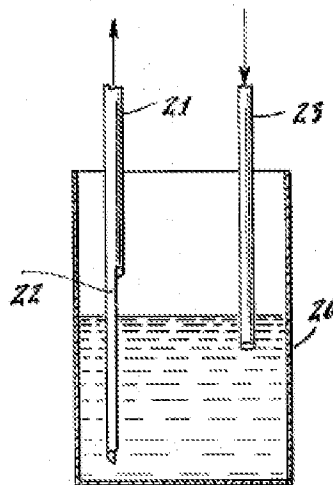


Figure 5 is said to show “the body cavity fluid holding container,” i.e. container 1 in Figure 1 (*id.* at col. 2, ll. 1-4).

10. Sato discloses that “a container having a means for removing the body cavity fluid from the surface portion of the fluid, such as shown in FIG. 5, is especially preferred, since simultaneous removal of that portion of fibrin which has precipitated to the container bottom is reduced, whereby blockage of the concentrator or filter membranes can be prevented” (*id.* at col. 2, l. 68 to col. 3, l. 6).

11. Sato discloses that the “main body **20** of the container shown in FIG. 5 is made of a flexible material, ... and body cavity fluid outlet **21** and inlet **23** are disposed in the upper part of said main body. Within the main body, there is disposed a slit element **22** connected to said outlet **21**” (*id.* at col. 3, ll. 6-12).

12. Sato describes the operation of the slit element as follows:

When the body cavity fluid is taken out of the container, that part of the main body of the container which is situated above the fluid level surface collapses under the negative pressure in the container and thereby comes into close contact with the slit element, whereby a passage-way for the body cavity fluid is formed and the fluid is always taken out from the fluid surface portion ...[and] fibrin precipitate remains on the bottom.

(*Id.* at col. 3, ll. 16-25.)

### *Principles of Law*

“In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. Only if that burden is met, does the burden of coming forward with evidence or



argument shift to the applicant.” *In re Rijckaert*, 9 F.3d 1531, 1532 (Fed. Cir. 1993).

“[D]ependent claims are nonobvious if the independent claims from which they depend are nonobvious.” *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992).

### *Analysis*

Claim 1 is directed to an elongated connector comprising, among other things, an end inside a collection bag that has a one notch that “acts to prevent the collection bag from sealing off the conduit during surgery so that a sufficient amount of air will remain within the bag to allow a surgeon to air-vent an aspiration path during surgery.”

Appellants argue that one of skill in the art would not have been motivated to combine the notched end of Sato with the aspiration cartridge of Worrich because Worrich does not identify the need to air-vent the aspiration line and the cited section of Sato does not disclose air-venting an aspiration path (App. Br. 3-4).

We agree with Appellants that the Examiner has not adequately shown that the cited references would have made obvious the claimed product. Worrich does not disclose that the waste line that attaches to the collection bag is used for air-venting an aspiration path. Sato discloses a notched end of a connector tube, but the connector tube is used to retrieve fluid from a bag, rather than delivering fluid to a collection bag as in Worrich’s aspiration device.

The Examiner has not pointed to any disclosure in Worrich or Sato that supports the conclusion that a skilled artisan would have combined

Sato's notched end with Wortrich's device "in order to provide a fluid flow pathway through the connector line even when the bag collapses" (Ans. 4). The Examiner has not pointed to any disclosure of air-venting from the collection bag in either of the references. Further, although Sato discloses that its bag collapses around the notched end of the tube under negative pressure, Sato's tube withdraws fluid while Wortrich's emits fluid. The Examiner has not provided an adequate explanation of why a skilled artisan would expect that the bag of Wortrich's device would collapse around the waste line or, even if it did, why that would suggest adding a notched fitment to Wortrich's device.

Thus, the Examiner has not adequately explained why one of skill in the art would have been motivated to provide the Wortrich waste line with the Sato notched end, and therefore the Examiner has not carried the initial burden of presenting a prima facie case of obviousness of claim 1 in accord with *In re Rijckaert*. The rejection of claims 1 and 4 is reversed.

The Examiner has rejected claims 2 and 3 under 35 U.S.C. § 103(a) as obvious in view of Wortrich, Sato, and Bennett.

Claims 2 and 3 depend directly and indirectly, respectively, from independent claim 1. For these rejections, the Examiner relies on the combination of Wortrich and Sato as discussed above, and cites the Bennett reference to supply dependent claim limitations. As discussed above, however, the Examiner has not adequately explained how the Wortrich and Sato would have suggested the claimed elongated connector with a notched end, and the rejection of claims 2 and 3 is reversed.

CONCLUSIONS OF LAW

The evidence does not support the Examiner's conclusion that one of skill in the art would have been motivated to combine the references to provide Sato's notched end on the Wortrich waste line.

SUMMARY

We reverse the rejection of claims 1-4 under 35 U.S.C. § 103(a).

REVERSED

Ssc:

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